Reference
[1] Diedrich O, von Strempel A, Schloz M, Schmitt O, Kraft CN. Long-term observation and management of resolving infantile idiopathic scoliosis: a 25-year-follow-up. J Bone Joint Surg [Br] 2002;84–B:1030–5.

http://dx.doi.org/10.1016/j.rehab.2015.07.047

CO04-006-e

Should the hand replantation of a 63-year-old patient be attempted?

M.-N. Thaury (Dr)[a,*], S. Audemar (Dr)[a,*], F. Ster (Dr)[a], M. Izquierdo [a], M. Chammas (Prof)[b], B. Coulet (Prof)[b], C. Lazerges (Dr)[b], J. Andrin (Dr)[b], I. Djerbi (Dr)[b]
[a] *Cliniques du Docteur Jean-Ster, Lamalou Les Bains, France*
[b] *CHRU Lapeyronie, France*
[*] *Corresponding author.*
E-mail address: simona.audemar@cliniques-ter.fr (S. Audemar)

Introduction Progress in microsurgical techniques for the last 40 years revealed a new population of patients: those with replanted hand.
Observation We present the case of a 63-year-old patient with a complete traumatic radio carpal amputation. His amputated hand was successfully replanted in emergency on December 8, 2014; we will detail the issues in post-operative rehabilitation treatment and the need to solve multiple problems. We will discuss about vascular question, risk of infection, skin appearance, bone, tendon, neurological, and psychological component, some objectives having to take in consideration different factors involved in the recovery.
Discussion The replantation of a hand in a 63-year-old patient requires specialized care, long and difficult labor with an uncertain future for reinnervation. On the other side, the myoelectric prosthesis allows to the patient a rapid return to social life.
Keywords Replantation; Amputation of the hand; Postoperative rehabilitation
Disclosure of interest The authors declare that they have no conflicts of interest concerning this article.

http://dx.doi.org/10.1016/j.rehab.2015.07.048

Posters

P013-e

Osseointegration of the lower limb: Reduction of mechanical strain on the abutment

E. Mollaret (Ingénieur)[a,*], M. Bertrand Marchand (Dr)[b]
[a] *Clinique St Roch/Dr Marion Bertrand Marchand, Montpellier, France*
[b] *Clinique Saint-Roch, France*
[*] *Corresponding author.*
E-mail address: eric_mollaret@yahoo.fr (E. Mollaret)

Introduction The osseointegration improves the quality of life for amputees and brings indolence [1].
Unlike a socket, the abutment concentrates stresses. The tall and heavy patients have to face break of abutment. Abutment's changes have to be done in operating room under general anesthesia.
In the case of a patient varus/valgus, how to reduce the mechanical stresses on the abutment in order to reduce the frequency of changing this critical part?
Materials and methods This study has focused on a patient valgum osseointegrated since January 2012 and in very good health.
We have evaluated in static position (bipodal support, without speed or acceleration, frontal plane) mechanical stress at the junction abutment–implant in three different cases:
– prosthesis aligned with the abutment;
– prosthesis aligned with the abutment with varus due to slight plastic deformation of the abutment;
– prosthesis vertically and translated in the frontal plane with a load line passing through the bottom of the abutment and the femoral head.
We have used a telemetry, goniometer, ruler, CAD software, and scientific calculator.
The third case was possible by a long length of the residual femur's bone.
Results For a patient whose weight is 80 kg and the size 1.88 m, the values [1,2] of the torque at the junction abutment–implant are:
Case 1: 20.8 Nm
Case 2: 31, 68 Nm
Case 3: 2.24 Nm.
We find between the case 1 and case 3:
– a sharp reduction of flows all around the abutment;
– a better ambulation.
Discussion The mechanical stress applied to the abutment is divided by 10 for a load line–in the frontal plane–from the bottom of the abutment to the femoral head.
We can say that a such setting is more physiological:
– reduces strain and increases the life of the abutment for all patients;
– decreases patient's anxiety.
Keywords Osseointegration; Reduction of mechanical strain; Titanium OPRA
Disclosure of interest The authors declare that they have no conflicts of interest concerning this article.
References
[1] Branemark R, Bahuaud J, Bertrand M. 2006.
[2] Kaphingst, Fitzlaff. 1990.
Further reading
Perez J.P. Mécanique points matériels, solides, fluides. 1995

http://dx.doi.org/10.1016/j.rehab.2015.07.049

P014-e

Assessment of the quality of life of lower-limb amputees with orthosis

M. Rekik (Dr)[a], A. Haj Salah (Dr)[a], M. Sghir (Dr)[a], I. Ksibi (Dr)[b], W. Said (Dr)[a], W. Kessomtini (Prof)[a,*]
[a] *CHU Taher Sfar Mahdia, Mahdia, Tunisia*
[b] *Hôpital Militaire Principal d'Instruction de Tunis, Tunisia*
[*] *Corresponding author.*
E-mail address: kwassia@yahoo.fr (W. Kessomtini)

Objective The aim of this work is to analyze the becoming and the quality of life (QOL) of implanted patients following a major lower extremity amputation.
Material and methods We conducted a cross-sectional study including 17 patients fitted after major lower extremity amputation. We assessed their QOL using the "Nottingham health profile" NHP (with 6 items: mobility, emotional reactions, energy, social isolation, sleep, pain) and the analogue scale VAS of QOL graduated from 0 to 100 mm. In a second time, we studied the correlation between QOL and age, sex, comorbidity, level of amputation, and evolution.
Results It was about 17 patients, including 12 men and 5 women with a mean age 53 years. Fifteen patients had a lot of comorbidities. The amputation had been operated from 3 to 32 months before evaluation. Amputation Level was transfemoral in 6 patients and transtibial in 11. EVA QOL was averaged 62/100. The average score of NHP was 46/100. Items mainly altered were mobility, pain then energy. Furthermore, we found a correlation